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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,695	07/16/2004	Tatsuhiko Suzuki	OOCL-163 (PC-P1780US	6636
26479	7590	11/14/2006	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			SMITH, PHILIP ROBERT	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,695

Applicant(s)

SUZUKI, TATSUHIKO

Examiner

Philip R. Smith

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☒ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

- [01] Objections to the specification are withdrawn in view of the amendments of 9/28/06.

Claim Rejections - 35 USC § 112

- [02] The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- [03] Claims 15, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [04] Applicant recites that "the directive unit displays directives on LEDs." It is not clear how an LED can be a "directive," or how a directive unit can "display directives on LEDs." An LED is strictly an output, and a directive is an input. It is not clear to a skilled artisan how an operator would direct via an LED.

Claim Rejections - 35 USC § 102

- [05] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [06] Claim 14 is rejected under 35 U.S.C. 103(a) as being anticipated by Kobayashi (6,491,628). Claim 14 is rejected for substantially the same reasons as set forth in the Office action of 4/24/2006, as the recited "51E" may be construed as a "mode

Art Unit: 3739

selection switch," the selected mode being, for example, upward moving or downward moving.

[07] As noted in the Office action of 4/24/06, Kobayashi discloses an electronic endoscope system comprising:

[07a] an endoscope having a solid-state imaging device;

[07b] a signal processing unit which receives a signal from the solid-state imaging device and converts the signal into a video signal;

[07c] a detector provided in the signal processing unit, the detector detecting the type of the solid-state imaging device which sends the signal to the signal processing unit;

[08] Kobayashi further discloses a mode selection switch ("function key 51F," 9/13) for accepting a user input to instruct signal processing by the signal processing unit in accordance with a selected mode ("magnifying process"), the mode selection switch being provided in the electronic endoscope system, wherein the selected mode is zoom ON/OFF; and

[09] a restricting portion for restricting the instruction, from the switch, input by a user based solely on the type of solid-stage imaging device detected by the detector:

...when it is determined that the pixel number of the CCD 12 is not larger than the effective pixel number, at Step 302, the process goes to Step 322. In Step 322, image-pixel signals generated at all pixels in the CCD 12 are read from the CCD 12, and the interpolation process is performed at the image memory 23. Thus, the magnified-image formed by the interpolation process is displayed on the monitor 50. (13/66-14/6)

Claim Rejections - 35 USC § 103

[10] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

[11] Claims 1,3,5-10,12,13,16,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Eino (2003/0097042) and in further view of Oppermann (6,334,157).

[12] With regard to claims 1,10,16,18: Kobayashi discloses an electronic endoscope system comprising:

[12a] an endoscope ("10") having a solid-state imaging device ("12");

[12b] a signal processing unit (comprising "17," "21" & "26") which receives a signal from the solid-state imaging device and converts the signal into a video signal;

[12c] a detector (composing "system control circuit 34") provided in the signal processing unit, the detector detecting the type of the solid-state imaging device which sends the signal to the signal processing unit;

[12d] a directing unit (further composing "system control circuit 34") for providing, to the signal processing unit, a signal processing directive according to a selection by an operator (directed by "shift key 51E on the keyboard 51," 7/3);

[12e] a directive displaying unit ("monitor 50," 15/13);

[12f] a restricting unit for restricting the operation of the directing unit ("when it is determined that the position of the pointer P is not within the image-area

NA... the process returns to Step 402 without shifting the pointer P, so that the pointer P remains within the image-area NA," 16/60-64) according to the result of the detecting performed by the detector ("the size of the image area NA is predetermined in accordance with the pixel number of the CCD 12," 6/52-65).

[13] Kobayashi does not disclose that the directing unit displays contents of directives which can be selected on the directive displaying unit; or that the contents of directives are display apart from an image produced by the image video signal ("NA," as noted above).

[14] It is well-known in the art to use obvious alternatives. One such alternative to a keyboard is a control panel image, such as that disclosed by Eino. Eino discloses the following in [0045]:

[0045] The examination PC 3 includes a keyboard 22 for inputting data or the like, a mouse 23 for operating various instructions as a pointing device, and the LCD monitor 21 (hereinafter, simply, monitor) on which an endoscopic image and an endoscope control panel image containing representations of angulation buttons and others that help a user control the endoscope 2 are displayed.

[15] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the directing unit disclosed by Kobayashi display contends of directives which can be selected on the directive displaying unit. Kobayashi, for example states in 17/63-67 that:

Art Unit: 3739

In the first to third embodiments, the keyboard, touch panel and the pointer shift buttons are used as input devices, however, other input devices, such as a pointing device (mouse) or a joystick, may be applied and further, may be provided at the manipulating section of the video-scope.

- [16] A skilled artisan would be motivated to do so because computer screens present a well-known interface. Also, providing the contents of the directives on a control panel image adjacent to the image video signal is clear and convenient.
- [17] Kobayashi in view of Eino does not disclose that the restricting portion restricts the displaying of contents of the directives in the directive displaying unit. Kobayashi does, however, disclose that invalid commands will be ignored, thus restricting the execution of said commands (16/60-64, as noted above).
- [18] It is well-known in the art to restrict the display of a circumstantially invalid command as it appears on a displaying unit. Oppermann, for example, discloses that "[t]he scissor button, however, is only invocable when text is selected; when no text is selected, the button is inactive and takes on a gray appearance" (9/35-38).
- [19] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the execution-restricted directives disclosed by Kobayashi, displayed as taught by Eino, be display-restricted as disclosed by Oppermann. A skilled artisan would be motivated to do so in order to make clear to the operator that the command is invalid.
- [20] With regard to claims 5-6: Kobayashi discloses that the directing unit may include

Art Unit: 3739

a switch on the front panel/keyboard of the signal processing unit ("51E," as noted above), and wherein the restricting portion further restricts handling of the switch (as noted above).

- [21] With regard to claim 7: Kobayashi discloses that the processing to be performed by the signal processing unit may be electronic zooming ("[t]he electronic endoscope of the present invention has a function for magnifying a specific portion of the displayed observed image," 1/66).
- [22] With regard to claim 8: Kobayashi discloses that the restricting portion further restricts indication of a feature (by preventing the pointer P from re-centering or magnifying the image outside the image area NA, as noted above) that achieves the signal processing directive to be restricted.
- [23] With regard to claim 9: Kobayashi discloses that the signal processing directive to be restricted is enlargement based on electronic zooming, and the presentation of an electronic zooming magnification is restricted ("If the function key 51F is operated when the normal-image and the pointer P is displayed on the monitor 50, a magnified image, which is a magnified image of a specific portion, is displayed such that the position indicated by the pointer P becomes the center of the magnified image," 7/17).
- [24] With regard to claim 12: Oppermann discloses that unavailable directives are displayed in the directive displaying unit in a manner that indicates such unavailability to the operator.

[24a]

Additional Claim Rejections - 35 USC § 103

- [25] Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Eino and Oppermann.
- [26] The signal processing unit disclosed by Kobayashi is inherently capable of implementing basic features and performing extension processing on the image signal.
- [27] Kobayashi discloses the claimed invention except for a "main board" delineated from an "expansion board," which compose the disclosed signal processing unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a signal processing unit with a "main board" and an "expansion board," since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.
- [28] A skilled artisan might be motivated to provide extension processing on an expansion board separate from the main board in order to provide specialized extension processing for individual apparatuses.
- [29] The signal processing unit disclosed by Kobayashi is inherently capable of "detecting" its component parts.

Additional Claim Rejections - 35 USC § 103

- [30] Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Kobayashi in view of Eino and Oppermann in further view of Yarush (6,692,432).

[31] Kobayashi discloses a directing unit and a restricting unit, as noted above.

Kobayashi does not disclose that the directing unit comprises an LED on the front panel. Kobayashi does not disclose that the restricting unit restricts lighting of the LED.

[32] Yarush discloses a directing unit comprising an LED on a front panel ("light emitting diode 624," 31/47), the lighting of which may be restricted by a restricting unit ("on/off switch 622," which "indicates that the power has been turned on").

[33] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that Kobayashi's endoscope apparatus, which inherently has power switch, have an LED which indicates that the power has been turned on. The "light emitting diode 624" may compose the directing unit, and the "on/off switch 622" may compose the restricting unit. A skilled artisan would be motivated to provide an LED which indicates the on/off state of the power delivered to the endoscope because this indicates the status of the power supply.

Additional Claim Rejections - 35 USC § 103

[34] Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Eino and Oppermann.

[35] Oppermann discloses that an unavailable directive is displayed in gray. Hatching an unavailable directive is an obvious design choice.

Response to Arguments

[36] Applicant's arguments with respect to the claims, excluding claim 11, have been considered but are moot in view of the new ground(s) of rejection.

[37] With regard to claim 11, Applicant's arguments filed 9/28/2006 have been fully considered but they are not persuasive.

[38] Applicant contends that "the ON/OFF switch [disclosed by Yarush] cannot function as the claimed restricting unit." It is maintained that the ON/OFF switch disclosed by Yarush restricts the lighting of an LED, and may compose a "restricting portion," thereby teaching the claimed invention.

Conclusion

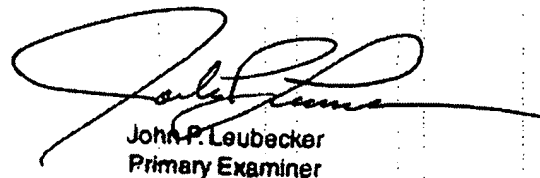
[39] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

[40] A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this

Art Unit: 3739

final action.

- [41] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [42] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [43] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker
Primary Examiner